NEW MEXICO
ENVIRONMENT DEPARTMENT

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BUTCH TONGATE
Cabinet Secretary

BRUCE YURDIN
Acting Deputy Secretary

Certified Mail - Return Receipt Requested

October 31, 2018

Honorable Mayor Chon Fierro
City of Bayard
P.O. Box 728
Bayard, NM 88023

RE: Minor Municipal, SIC 4952, NPDES Compliance Evaluation Inspection, City of Bayard Wastewater Treatment Plant (WWTP), NPDES Permit No. NM0020231, October 31, 2018

Dear Mayor Fierro:

Enclosed please find a copy of the report and check list for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

David Long
US Environmental Protection Agency, Region VI
Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

Sarah Holcomb
New Mexico Environment Department
Surface Water Quality Bureau
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

If you have any questions about this inspection report, please contact Barbara Cooney at (505) 827-0212 or at barbara.cooney@state.nm.us.

Sincerely,

Sarah Holcomb
Program Manager
Point Source Regulation Section
Surface Water Quality Bureau

cc: Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
David Long, USEPA (6EN-WM) by e-mail
Nancy Williams, USEPA (6EN) by e-mail
Amy Andrews, USEPA(6EN-WM) by e-mail
David Esparza, (6EN-WM) by e-mail
Brent Larsen and Tung Nguyen, USEPA (6WQ-PP)
NMED District III, by e-mail

EPA

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

1	Transaction Code	NPDES	yr/mo/day	Inspec. Type	Inspector	Fac Type
	N	NM0020231	180928	C	S	1

Remarks: BAYARD WASTEWATER PLANT

Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved
1	3	N	N	MINOR

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*	Entry Time /Date	Permit Effective Date
Bayard WWTP – Take HWY 180 north from Deming aprx. 41 miles to the north side of the Town of Hurley and the south side of the town of Bayard. Turn right at North Hurley road, proceed across RR tracks to T intersection. Turn left and follow the road to a closed gate and a chain link fence to the WWTP, Open and enter through the gate and close it behind you. Grant County, New Mexico	10:30 Hours / September 28, 2018	October 1, 2015
	Exit Time/Date 12:50 Hours / September 28, 2018	Permit Expiration Date September 30, 2020

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)	Other Facility Data
Jason Polk, Public Works Director 575-590-1248 Gerald Jager, Operator 575-537-3462	GPS: Latitude N. 32° 44' 50" Longitude . W. -108° 07' 48" SIC 4952
Name, Address of Responsible Official/Title/Phone and Fax Number Chon Fierro, Mayor (elected 2018) 575-537-3327 Cristy Ortis, City Clerk 575-537-3327 City of Bayard, New Mexico P.O. Box 728 Bayard, NM 88023	Contacted Yes [ ] No [X]

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

M	Permit	S	Flow Measurement	M	Operations & Maintenance	N	CSO/SSO
S	Records/Reports	S	Self-Monitoring Program	M	Sludge Handling/Disposal	N	Pollution Prevention
M	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
S	Effluent/Receiving Waters	S	Laboratory	N	Storm Water	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

The City of Bayard WWTP does not have a discharge outfall to Whitewater Creek as allowed by this NPDES permit. 100% of the treated effluent is either sent to the Tyrone mine or used as reuse water for the grass and vegetation at the cemetery.

For more information, see the Further Explanations part of this report.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
Barbara Cooney BC	NMED/SWQB 505-827-0212 /505-827-0160	10-31-18
Signature of Management QA Reviewer Sarah Holcomb Sarah Holcomb	Agency/Office/Phone and Fax Numbers NMED/SWQB505-827-0187 / 505-827-0160	Date 10-31-18

Bayard Waste Water Treatment Plant	PERMIT NO. NM0020231

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS ☐ S ☒ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED YES__*)

DETAILS: Bayard has a new Mayor and should update the information on the permit for the signatory.

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE	☐ Y ☒ N ☐ NA
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES	☐ Y ☐ N ☒ NA
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT	☒ Y ☐ N ☐ NA
4. ALL DISCHARGES ARE PERMITTED	☒ Y ☐ N ☐ NA

SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. ☒ S ☐ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED No__*)

DETAILS: The permittee samples for the NMED Discharge Monitoring Permit, but does not discharge to surface water. However they are prepared for sampling if they need to for the NPDES permit.

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.	☐ Y ☐ N ☒ NA
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.	☐ S ☐ M ☐ U ☒ NA
a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING	☐ Y ☐ N ☒ NA
b) NAME OF INDIVIDUAL PERFORMING SAMPLING	☐ Y ☐ N ☒ NA
c) ANALYTICAL METHODS AND TECHNIQUES.	☐ Y ☐ N ☒ NA
d) RESULTS OF ANALYSES AND CALIBRATIONS.	☐ Y ☐ N ☒ NA
e) DATES AND TIMES OF ANALYSES.	☐ Y ☐ N ☒ NA
f) NAME OF PERSON(S) PERFORMING ANALYSES.	☐ Y ☐ N ☒ NA
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.	☒ S ☐ M ☐ U ☒ NA
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.	☒ S ☐ M ☐ U ☒ NA
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.	☐ Y ☐ N ☒ NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. ☐ S ☒ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED Yes__*)

DETAILS:

1. TREATMENT UNITS PROPERLY OPERATED.	☐ S ☒ M ☐ U ☐ NA
2. TREATMENT UNITS PROPERLY MAINTAINED.	☐ S ☒ M ☐ U ☐ NA
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.	☒ S ☐ M ☐ U ☐ NA
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.	☒ S ☐ M ☐ U ☐ NA
5. ALL NEEDED TREATMENT UNITS IN SERVICE.	☐ S ☒ M ☐ U ☐ NA
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.	☐ S ☐ M ☒ U ☐ NA
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.	☐ S ☐ M ☒ U ☐ NA
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.	☒ Y ☐ N ☐ NA
STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.	☒ Y ☐ N ☐ NA
PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.	☒ Y ☐ N ☐ NA

Bayard Waste Water Treatment Plant	PERMIT NO. NM0020231

SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR?	☒ Y ☐ N ☐ NA
IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED?	☒ Y ☐ N ☐ NA
HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?	☒ Y ☐ N ☐ NA
10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT?	☐ Y ☒ N ☐ NA
IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?	☐ Y ☒ N ☐ NA

SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED No)*.
DETAILS: Facility does not discharge to surface water, samples taken for Groundwater Discharge Permit, but not for NPDES purposes.

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.	☐ Y ☐ N ☒ NA
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.	☐ Y ☐ N ☒ NA
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.	☐ Y ☐ N ☒ NA
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.	☐ Y ☐ N ☒ NA
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.	☐ Y ☐ N ☒ NA
6. SAMPLE COLLECTION PROCEDURES ADEQUATE	☐ Y ☐ N ☒ NA
a) SAMPLES REFRIGERATED DURING COMPOSITING.	☐ Y ☐ N ☒ NA
b) PROPER PRESERVATION TECHNIQUES USED.	☐ Y ☐ N ☒ NA
c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3.	☐ Y ☐ N ☒ NA
7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT?	☐ Y ☐ N ☒ NA

SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED No__)*
DETAILS: In line Ultrasonic Flow meter.

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. TYPE OF DEVICE	☒ Y ☐ N ☐ NA
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.	☒ Y ☐ N ☐ NA
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED.	☐ Y ☒ N ☐ NA
4. CALIBRATION FREQUENCY ADEQUATE. *(DATE OF LAST CALIBRATION* None)	☐ Y ☒ N ☐ NA
RECORDS MAINTAINED OF CALIBRATION PROCEDURES.	☐ Y ☒ N ☐ NA
CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.	☐ Y ☒ N ☐ NA
5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE.	☐ Y ☐ N ☒ NA
6. HEAD MEASURED AT PROPER LOCATION.	☐ Y ☐ N ☒ NA
7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES.	☒ Y ☐ N ☐ NA

SECTION F – LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED __)*
DETAILS:
The facility has equipment for pH, TSS, TRC, Fecal Coliform bacteria sampling onsite. These are analyzed for the Groundwater Discharge Permit. If they ever need to sample for surface water they have the equipment and are prepared to do sampling and analyses of effluent.

1. EPA APPROVED ANALYTICAL PROCEDURES USED *(40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)*	☒ Y ☐ N ☐ NA

Bayard Waste Water Treatment Plant	PERMIT NO. NM0020231

SECTION F - LABORATORY (CONT'D)

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED ☐ Y ☐ N ☒ NA

3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. ☐ S ☐ M ☐ U ☒ NA

4. QUALITY CONTROL PROCEDURES ADEQUATE. ☐ S ☐ M ☐ U ☒ NA

5. DUPLICATE SAMPLES ARE ANALYZED. ___ % OF THE TIME. ☐ Y ☐ N ☒ NA

6. SPIKED SAMPLES ARE ANALYZED. ___ % OF THE TIME. ☐ Y ☐ N ☒ NA

7. COMMERCIAL LABORATORY USED. ☐ Y ☐ N ☒ NA

LAB NAME

LAB ADDRESS

PARAMETERS PERFORMED

SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED ___).*

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	No Discharge	No Discharge	No Discharge	No Discharge	No Discharge	No Discharge	

RECEIVING WATER OBSERVATIONS

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. ☐ S ☒ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED Yes).*
DETAILS:

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. ☐ S ☒ M ☐ U ☐ NA

2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503. ☒ S ☐ M ☐ U ☐ NA

3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: _____ (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

SECTION I - SAMPLING INSPECTION PROCEDURES *(FURTHER EXPLANATION ATTACHED ___).*

1. SAMPLES OBTAINED THIS INSPECTION. ☐ Y ☒ N ☐ NA

2. TYPE OF SAMPLE OBTAINED

GRAB _____ COMPOSITE SAMPLE ___ METHOD _____ FREQUENCY

3. SAMPLES PRESERVED. ☐ Y ☐ N ☒ NA

4. FLOW PROPORTIONED SAMPLES OBTAINED. ☐ Y ☐ N ☒ NA

5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE. ☐ Y ☐ N ☒ NA

6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE. ☐ Y ☐ N ☒ NA

7. SAMPLE SPLIT WITH PERMITTEE. ☐ Y ☐ N ☒ NA

8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED. ☐ Y ☐ N ☒ NA

9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT. ☐ Y ☐ N ☒ NA

Introduction

On September 28, 2018, Barbara Cooney of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the City of Bayard Wastewater Treatment Plant (WWTP). The City of Bayard WWTP has a design flow capacity of 0.6 MGD (million gallons per day) and is classified as a minor municipal discharger under the Federal Clean Water Act, Section 402, of the National Pollutant Discharge Elimination System (NPDES) permit program. It is assigned NPDES permit number NM0020231. This permit regulates the WWTP discharge to the intermittent Whitewater Creek in Water Quality Segment 20.6.4.98 a tributary of the Mimbres River according to the *State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 NMAC*. This segment includes the designated uses of livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact.

NMED performs a certain number of CEIs for the U.S. Environmental Protection Agency (USEPA), Region VI, under the NPDES permit program, in accordance with the Federal Clean Water Act. USEPA uses these inspections to determine compliance with the NPDES permit program. This inspection report is based on information provided by the permittee's representatives, observations made by the NMED inspector, and records and reports kept by the permittee and/or NMED.

Upon arrival at the WWTP at 10:30 hours, the inspector met Mr. Jason Jager, Plant Operator and Mr. Gerald Polk, Plant Manager and Public Utilities Manager, showed her credentials, explained the purpose of the inspection and conducted the entrance interview. Mr. Polk accompanied the inspector on a tour of the facility. An exit interview was conducted with Mr. Polk following the inspection. The inspector left the facility at 12:50 hours.

Treatment Scheme

The design flow for this facility is 0.6 MGD. Influent is collected from Bayard, Santa Clara, Fort Bayard, and the Village of Hurley. The headworks consist of a mechanical bar screen set on a timer, grit selector, and a lift station to send contents to the aeration basins. The aeration basins have fine bubble diffusers. Two final clarifiers are located after the post aeration unit and the aeration basins. Following the clarifiers, Ultra Violet (UV) units disinfect the effluent. UV disinfection consists of two circular units having 4 bulbs in each. When opacity gets to a low level it switches over to the other unit automatically. A portion of this effluent is sent to reuse at the cemetery and goes through a chlorination system to a holding tank. This WWTP has an NPDES permit for discharge to Whitewater Creek, however they are not allowed to discharge to this creek by the NMED – Groundwater Quality Bureau. The facility is designed to discharge to Phelps Dodge mine south of the Village of Hurley. The effluent pipe from the WWTP is enclosed and is buried under Whitewater Creek, the treated water goes through a lift station and flows through the pipe underground several miles downstream to a tailings pond of the FMI-Chino Mine. No discharge goes to Whitewater Creek normally, and there is no outfall location. In 2014 a line break occurred on the Chino Mine side of the river and large volumes of treated effluent were discharged. The NMED GWQB specifically does not allow discharge to Whitewater Creek because of legacy contamination of the soil and the potential of that being suspended and mobilized downstream, extending the area of contamination.

The permittee is in discussions with an engineer to design an alternate surface water discharge location on the other side of a ridge to the west of the WWTP to an ephemeral drainage that is not contaminated by legacy mining waste. An alternative outfall will need to be included in the NPDES permit for this location.

Solids Management

The aerobic digesters treat the solids and wasting occurs for approximately an hour each day from the clarifiers to the digesters. Three drying beds allow for air drying of the solids. The facility currently has no belt press and the volume of solids can be too great for the capacity of the drying beds during the monsoon season and the winter. The dried sludge is taken to the Silver City landfill for final disposal.

Further Explanations

Note: The sections are arranged according to the format of the enclosed EPA Inspection Checklist (Form 3560-3), rather than being ranked in order of importance.

Permit
Overall Rating For Permit (Marginal)

Permit Requirements For Permit
The permit Requires in Part III:

11. SIGNATORY REQUIREMENTS
All applications, reports, or information submitted to the Director shall be signed and certified.

a. ALL PERMIT APPLICATIONS shall be signed as follows:

(3) FOR A MUNICIPALITY, STATE, FEDERAL, OR OTHER PUBLIC AGENCY - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(a)The chief executive officer of the agency, or

(b)A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

MINOR - SEWAGE SLUDGE REQUIREMENTS

INSTRUCTIONS TO PERMITTEES

Select only those Elements and Sections which apply to your sludge reuse or disposal practice.

The sludge conditions do not apply to wastewater treatment lagoons where sludge is not wasted for final reuse/disposal. If the sludge is not removed, the permittee shall indicate on the DMR "No Discharge".

Although reporting is not required at this time, this permit may be modified or revoked and reissued to require an annual DMR.

Findings For Permit
1. The city has a new mayor, The Honorable Chon Fierro and notice should be sent by the permittee, to EPA and NMED about the changes in the responsible party and the designated signatory for reporting purposes. NetDMR should also be updated for this change.

2. The permit section IV for solids removal establishes requirements based on a lagoon system. This section of the permit in not reflective of the current activated sludge plant for solids testing and reporting. Under the current permit, annual sludge testing reports are not required. Though a modification to reflect the change of solids management should be made to this permit.

The permittee is collecting sampling data on the sludge as required by the receiving landfill. Those information have not been reported to NMED nor EPA.

Record Keeping and Reporting
Overall Rating For Record Keeping and Reporting (Satisfactory)

Self-Monitoring
Overall Rating For Self Monitoring (Satisfactory)

Operations and Maintenance
Overall Rating For Operations and Maintenance (Marginal)

Permit Requirements For Operations and Maintenance
The permit states in Part III.B.3.a:
The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as effectively as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit...

Findings for Operations and Maintenance:
1. Inadequate operational staff, only two operators are running this plant and are often called to do other maintenance in the city. Additional operators are necessary to allow for sick leave and vacation time. Information on Operator Certification can be found at the State's Utility Operator Certification Program website:
https://www.env.nm.gov/drinking_water/utility-operator-certification-program/

2. Clogged or inoperable diffusers in the aeration basin, needs cleaning and/or replacement.

3.Solids loading within the aeration basins and the secondary clarifiers is very high especially during the monsoon and winter seasons when the sludge drying beds stay wet because of the weather.

Flow Measurement
Overall Rating for Flow Measurement (Satisfactory)

Permit Requirements For Flow Measurement
The permit states, in Part III.C.6
Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

Findings for Flow Measurements:
The effluent flow meter is an inline system. There is no outfall and the discharge line is an enclosed pipe that carries the treated wastewater to the Chino Mine.

Laboratory
Overall Rating For Laboratory (Satisfactory)

Effluent And Receiving Water
Overall Rating For Effluent And Receiving Water (Satisfactory)

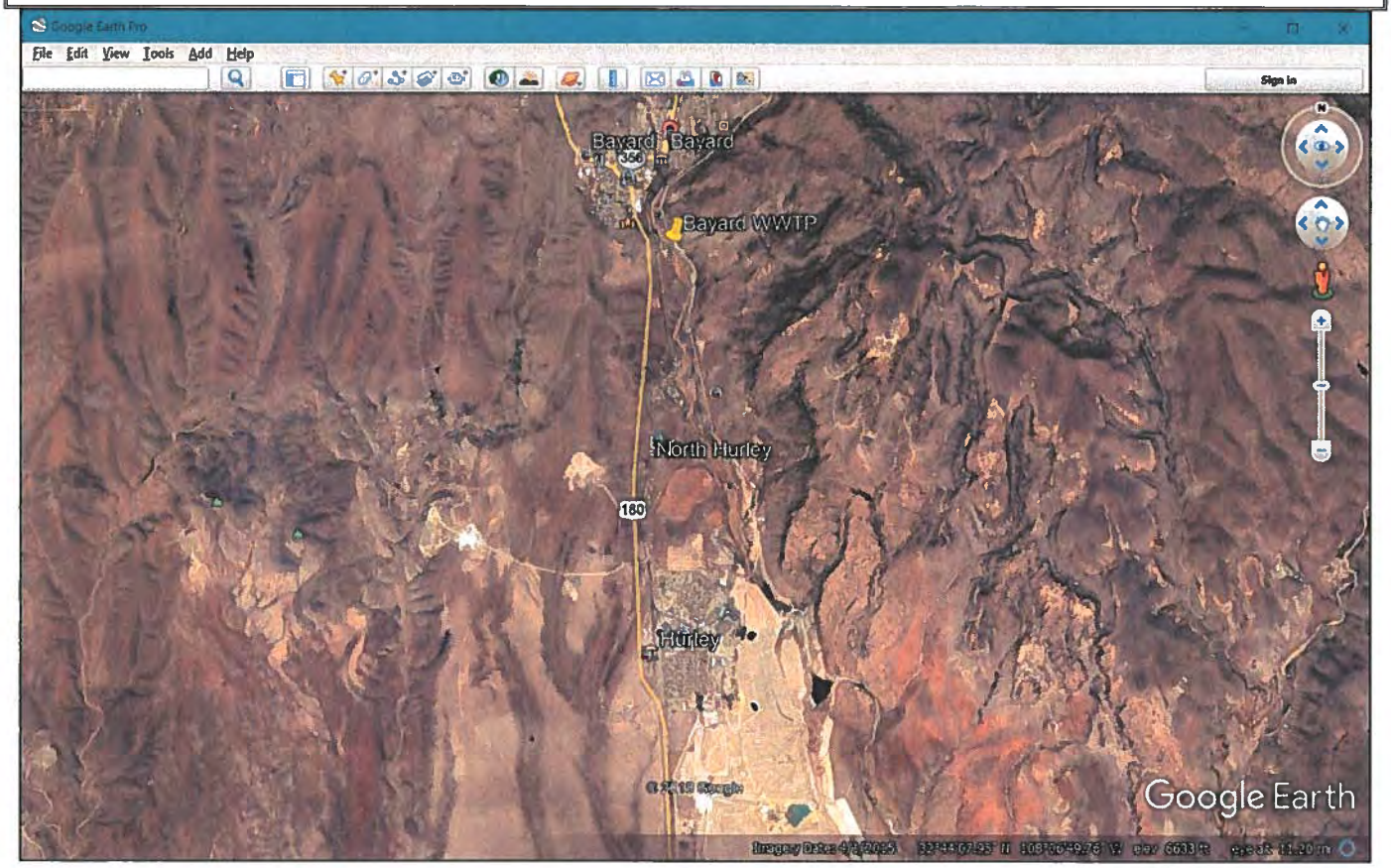
SLUDGE HANDLING

Overall Rating For Sludge Handling (Unsatisfactory)

Findings for Sludge Handling:

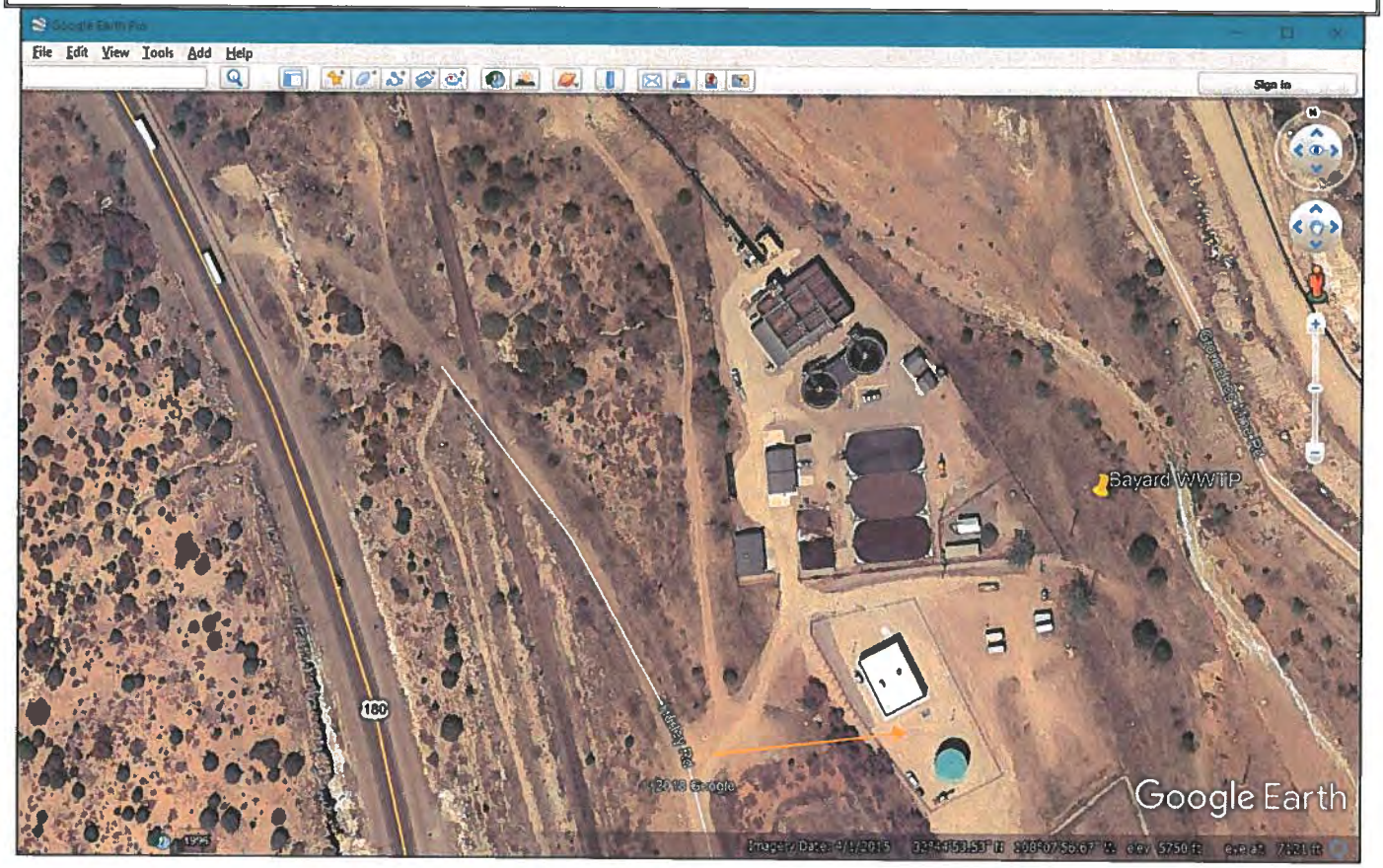
The volume of solids produced by this activated sludge wastewater treatment plant is greater than the capacity of the sludge drying beds, therefore solids are being held in the treatment basing at a higher concentration than is optimal. It is advisable for the facility to either increase the area for sludge drying beds, or to investigate using a sludge belt press for dewatering, so dryer solids may be removed more often for final disposal.

NMED/SWQB Official Photograph Log Photo # 1		
Photographer: Unknown	Date: September 28, 2018	Time: Unknown
City/County: Bayard / Grant		State: New Mexico
Location: City of Bayard Wastewater Treatment Plant		
Subject: Aerial View from Google Earth of the locations of the Bayard WWTP, Whitewater Creek and ponds at the FMI-Chino mine. To the West (left in the photo) of Bayard is a proposed site for an alternate discharge location away from Whitewater Creek. Lines to that location have not been designed at the time of this inspection.		



NMED/SWQB
Official Photograph Log
Photo # 2

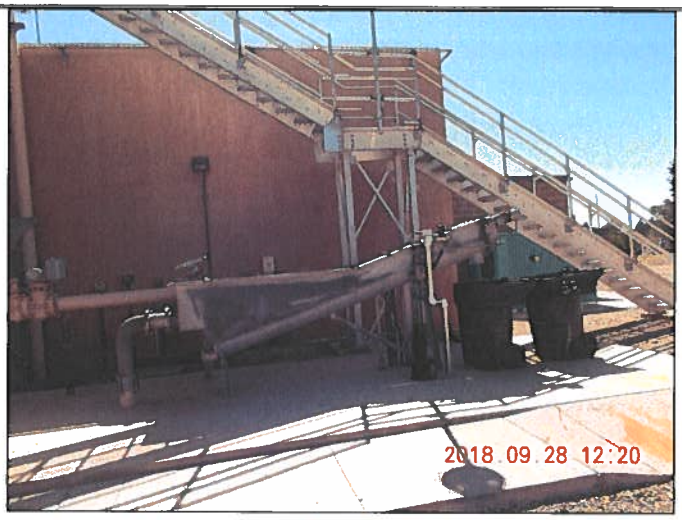
Photographer: Unknown	Date: September 28, 2018	Time: Unknown
City/County: Bayard / Grant		State: New Mexico
Location: City of Bayard Wastewater Treatment Plant		
Subject: Aerial View of the Bayard WWTP treatment units and of Whitewater Creek. Note the white staining in the creek is from a discharge line on the Chino Mine side of the creek and not from the direct discharge by the WWTP.		



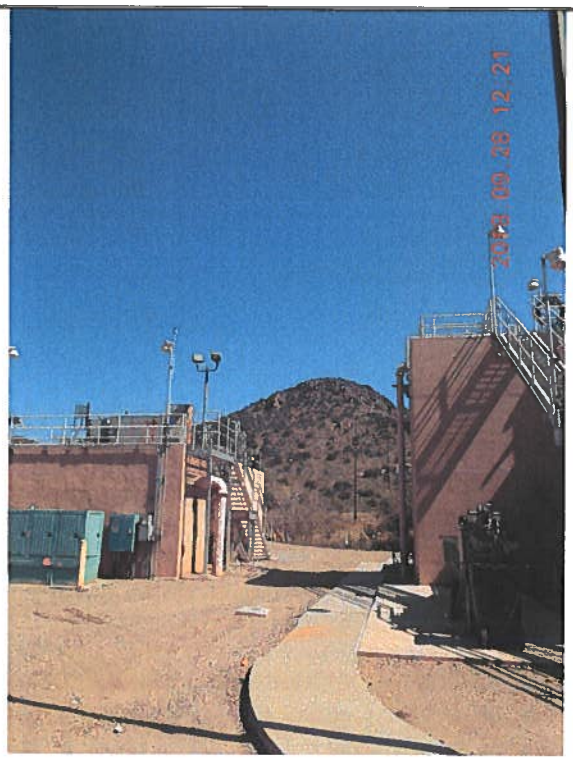
NMED/SWQB Official Photograph Log Photo #3		
Photographer: B. Cooney	Date: September 28, 2018	Time: 10:58 Hours
City/County: Bayard / Grant		State: New Mexico
Location: City of Bayard Wastewater Treatment Plant		
Subject: Scada system shows all the treatment units, also a call out system is in place for any problems that occur after normal business hours.		

NMED/SWQB Official Photograph Log Photo #4		
Photographer: B. Cooney	Date: September 28, 2018	Time: 12:21 Hours
City/County: Bayard / Grant		State: New Mexico
Location: City of Bayard Wastewater Treatment Plant		
Subject: Influent line to the treatment basins.		

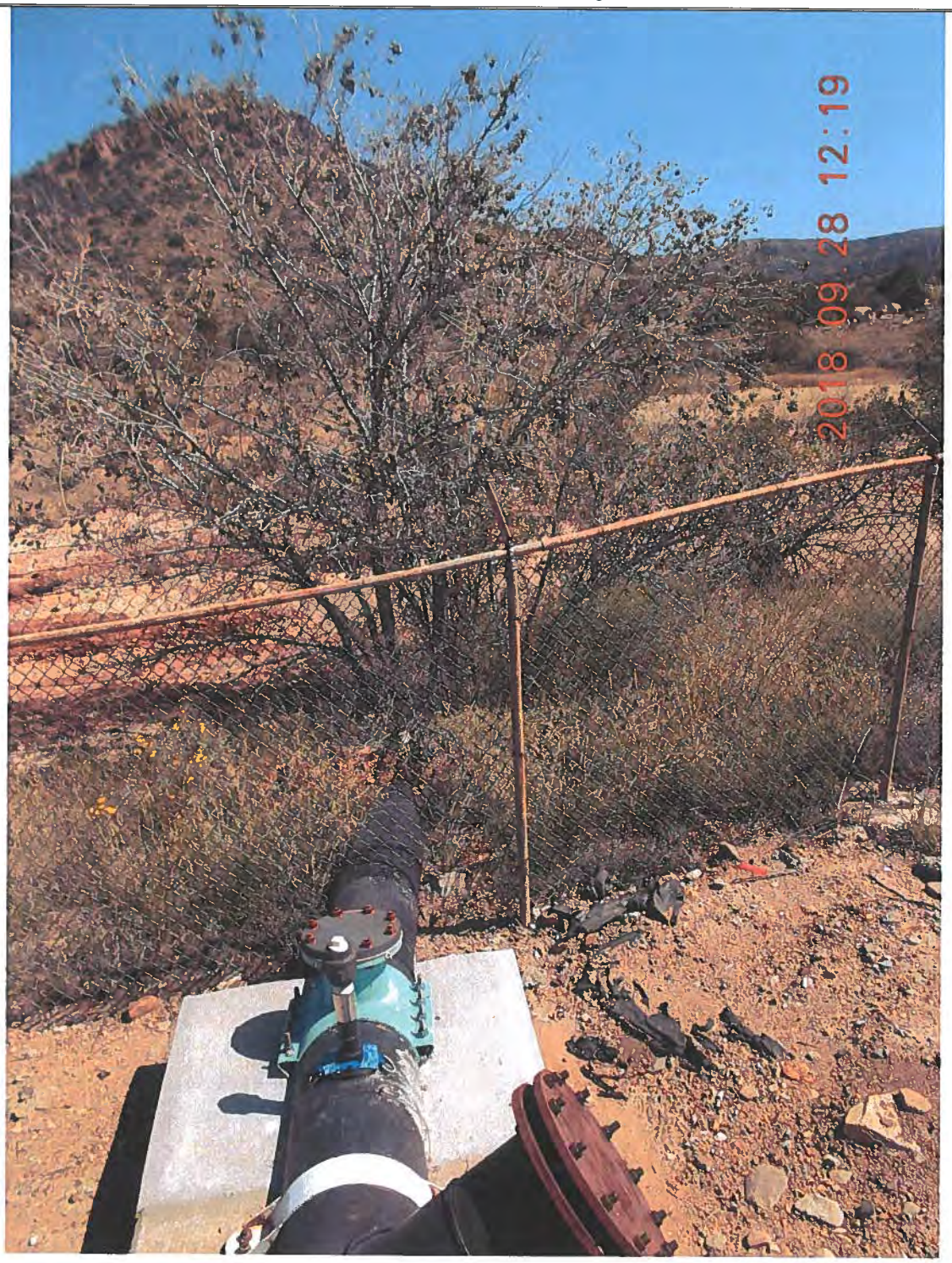
NMED/SWQB Official Photograph Log Photo # 5		
Photographer: B. Cooney	Date: September 28, 2018	Time: 12:20 Hours
City/County: Bayard / Grant		State: New Mexico
Location: City of Bayard Wastewater Treatment Plant		
Subject: Influent grit removal. The grit is sent to the Silver City landfill after passing the paint filter test.		



NMED/SWQB Official Photograph Log Photo # 6		
Photographer: B. Cooney	Date:	Time: 12:21 Hours
City/County: Bayard / Grant		State: New Mexico
Location: City of Bayard Wastewater Treatment Plant		
Subject: Above ground treatment units, backup generator.		



NMED/SWQB Official Photograph Log Photo # 7		
Photographer: B. Cooney	Date: September 28, 2018	Time: 12:19 Hours
City/County: Bayard / Grant		State: New Mexico
Location: City of Bayard Wastewater Treatment Plant		
Subject: The effluent pipe from the City of Bayard WWTP is enclosed and is buried under Whitewater Creek, the conveyance is underground several miles downstream to a tailings pond of the Chino Mine. No discharge goes to Whitewater Creek normally, and there is no outfall location. In 2014 a line break occurred on the Chino Mine side of the river and large volumes of treated effluent were discharged. The NMED GWQB specifically does not allow discharge to Whitewater Creek because of legacy contamination of the soil and the potential of that being suspended and mobilized downstream, extending the area of contamination.		



NMED/SWQB Official Photograph Log Photo # 8		
Photographer: B. Cooney	Date: September 28, 2018	Time: 12:18 Hours
City/County: Bayard / Grant		State: New Mexico
Location: City of Bayard Wastewater Treatment Plant		
Subject: Effluent Pipe and Whitewater Creek on the far side of the fence. The Creek was dry at the time of this inspection.		

NMED/SWQB Official Photograph Log Photo # 9		
Photographer: B. Cooney	Date: September 28, 2018	Time: 12:16 Hours
City/County: Bayard / Grant		State: New Mexico
Location: City of Bayard Wastewater Treatment Plant		
Subject: above ground units.		

NMED/SWQB Official Photograph Log Photo # 10		
Photographer: B. Cooney	Date: September 28, 2018	Time: 12:14 Hours
City/County: Bayard / Grant		State: New Mexico
Location: City of Bayard Wastewater Treatment Plant		
Subject: Subject: Sludge Drying Beds – two of the three are very full. The facility relies on air drying and this method limits the amount of solids to be wasted. There is no belt press for dewatering. The aeration basins appeared to be very heavily loaded with solids even though wasting occurs daily. This becomes very problematic in the monsoon season and during the winter when evaporation rates are low. Operators indicated that requests to City management have been made for the building of an area and purchase of a sludge belt press.		

NMED/SWQB Official Photograph Log Photo # 11		
Photographer: B. Cooney	Date: September 28, 2018	Time: 12:25 Hours
City/County: Bayard / Grant		State: New Mexico
Location: City of Bayard Wastewater Treatment Plant		
Subject: Main office and lab building and in the distance is the reuse chlorination building and the holding tank for reuse water.